

11-08-05

15689.61 2661

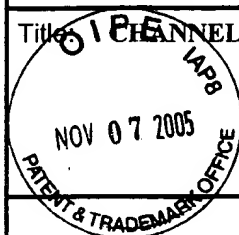
**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
**(Under 37 CFR 1.97(b) or 1.97(c))**

Docket No.  
15689.61

In Re Application Of: **Yukihiko Okumura et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/701,705	December 1, 2000	Unknown	022913	2661	Unknown

Title: **CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND**



Address to:  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

**37 CFR 1.97(b)**

1. ☐ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

**37 CFR 1.97(c)**

2. ☒ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

**OR**

☒ the fee set forth in 37 CFR 1.17(p).

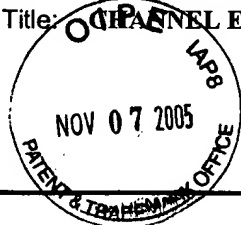
**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
15689.61

In Re Application of: Yukihiro Okumura et al.

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
09/701,705	December 1, 2000	Unknown	022913	2661	Unknown

Title: **OPTICAL SIGNAL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND**



**Payment of Fee**

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

- ☐ A check in the amount of \_\_\_\_\_ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **23-3178** as described below.
- ☐ Charge the amount of \_\_\_\_\_
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.
- ☒ Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

**Certificate of Transmission by Facsimile\***

I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fa
_____ (Date)
_____ Signature
_____ Typed or Printed Name of Person Signing Certificate

**Certificate of Mailing by First Class Mail**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on
_____ (Date)
_____ Signature of Person Mailing Correspondence
_____ Typed or Printed Name of Person Mailing Certificate

\*This certificate may only be used if paying by deposit account.

Signature

Dated: November 7, 2005

Adrian J. Lee  
Reg. No.: 42,785

CC:

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**Applicant(s): **Yukihiko Okumura et al.**

Docket No.

**15689.61**

Application No.

**09/701,705**

Filing Date

**December 1, 2000**

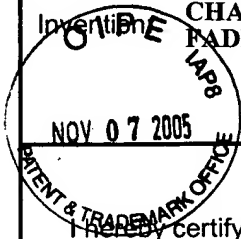
Examiner

**Qutbuddin Ghulamali**

Customer No.

**022913**

Group Art Unit

**2661****CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND  
FADING FREQUENCY DECISION DEVICE AND METHOD**

I hereby certify that the following correspondence:

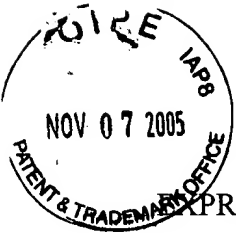
(see below)

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

November 7, 2005*(Date)*Adrian J. Lee*(Typed or Printed Name of Person Mailing Correspondence)*  
*(Signature of Person Mailing Correspondence)*EV 723466143 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.****SUBMITTED:**

Transmittal for Information Disclosure Statement (2 pages; duplicate);  
Information Disclosure Statement Under 37 C.F.R. § 1.97 ( 2 pages);  
Form PTO-1449 Listing of References (2 page);  
Legible Copy of References; (5 references)  
Certificate of Express Mail (EV723466143US);  
Acknowledgment Postcard



EXPRESS MAIL NO. EV 723466143 US

# PATENT APPLICATION

Docket No: 15689.61

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Yukihiko OKUMURA et al.

Serial No.: 09/701,705

Art Unit

2661

Filing Date: December 1, 2000

For: CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD

Customer No.: 022913

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. § 1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that any of these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record

believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed references or relevant portion thereof is also enclosed.

In accordance with 37 C.F.R. § 1.98(a)(3), the following concise explanation of the relevance of each listed reference that is not in the English language and unaccompanied by a translation into English is provided. The concise explanation for Japanese Publication No.: 04-070149 is provided in the English abstract of that publication. The concise explanation is provided in the translation of a Notice of Rejection received from the Japanese Patent Office.

(Promptness Certification or Submission Fee)  
Under 37 C.F.R. § 1.97(c)

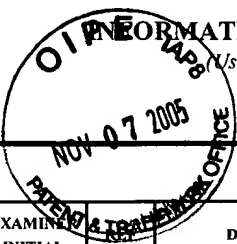
In accordance with 37 C.F.R. § 1.97(c), a PTO 2038 Credit Card form in the amount of \$180.00 is enclosed to secure consideration of the references submitted with this Information Disclosure Statement. Please credit any over payment or charge any additional fees to Deposit Account No. 23-3178 of the undersigned.

DATED November 7, 2005.

Respectfully submitted,



ADRIAN J. LEE  
Attorney for Applicant  
Registration No. 42,785  
Customer No. 022913

 <p><b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)</p>				Docket Number (Optional) <b>15689.61</b>		Application Number <b>09/701,705</b>			
				Applicant(s) <b>Yukihiko Okumura et al.</b>					
				Filing Date <b>December 1, 2000</b>		Group Art Unit <b>2661</b>			
<b>U.S. PATENT DOCUMENTS</b>									
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
<b>U.S. PATENT APPLICATION PUBLICATIONS</b>									
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
<b>FOREIGN PATENT DOCUMENTS</b>									
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES NO		
	1	04-070149	3/5/1992	Japan	H04L27	22	✓		
<b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, Etc.)									
	2	B-5-3 W-CDMA An Application of a Demodulation Scheme Using Parallel Channel Estimators in W-CDMA Systems Masafumi Usuda, et al. Page 238							
	3	Channel Estimation based on Time-Multiplexed Pilot Symbols Yoshi Honda, et al. page 31-35 (1996-08)							
EXAMINER				DATE CONSIDERED					
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

15689.61

Application Number

09/701,705

Applicant(s)

Yukihiko Okumura et al.

Filing Date

December 1, 2000

Group Art Unit

2661

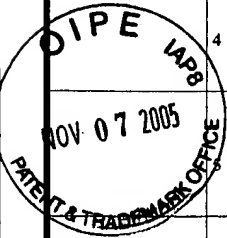
\*EXAMINER

INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Official Notice of Rejection  
Patent Application No.: 2003-277907  
Case No.: DCMH150269

Official Notice of Rejection  
Patent Application No.: 2003-277908  
Case No.: DCMH150270



EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.